INFECTIOUS WASTE

INTRODUCTION

This is a *general summary* of the guidelines, laws, and rules and regulations that govern **infectious waste** that is generated in dental facilities in Indiana. This information is provided for educational purposes only.

The Oral Health Program (OHP) at the Indiana State Department of Health (ISDH) cannot provide legal opinions on the interpretation of guidelines, laws and rules and regulations. Dental professionals are responsible for understanding and applying these as they pertain to the practice of dentistry in Indiana.

The primary governing rules and regulations for infectious waste generated in dental facilities in Indiana are contained in 410 IAC 1-3, Infectious Waste (Rule 3). This administrative code gains its authority from the laws contained in Indiana Code (IC) Title 16, Article 41, and Chapter 16.

IC 16-41-16 states that Indiana shall adopt rules for the treatment of infectious waste after considering other guidelines, including those from OSHA, IOSHA and the CDC.

The CDC provides useful guidelines pertaining to infection control (and infectious waste) in dental health care settings that are often needed for greater understanding of the dental profession's responsibilities.

The following *summarizes* many important requirements pertaining to infectious waste generated in dental facilities in Indiana.

WRITTEN POLICIES AND PROCEDURES

All persons and facilities subject to Infectious Waste, Rule 3, shall:

- have written policies and procedures that contain,
 - o the requirements contained in this rule,
 - o sanctions, including discipline and dismissal for failure to follow this rule;
- provide necessary instructions;
- maintain a record of instructions;
- make written policies and procedures, and records of instructions, available to the ISDH, upon request; and
- provide necessary personal protective equipment to those who will handle infectious waste.

CATEGORIES OF WASTE

Introduction

How to handle waste that is generated in dental facilities depends on the category of waste. The IAC defines *Infectious Waste* and OSHA defines *Regulated Waste*, with each definition providing categories of waste.

Categories

The definition and categories of <u>Infectious Waste</u> provided by 410 IAC 1-3-10 include:

- <u>contaminated sharps</u> or contaminated objects that could potentially become contaminated sharps;
- infectious biological cultures, infected associated biological, and infectious agent stock;
- pathological waste (defined in 410 IAC 1-3-12);
- blood and body fluids in liquid and semi-liquid form;
- body parts (such as extracted teeth), and more (see 410 IAC1-3-10); and
- other waste that has been intermingled with infectious waste.

This definition of *Infectious Waste* can produce three general categories of waste generated by dental facilities, including:

- Infectious waste consisting of *contaminated sharps*;
- Infectious waste other than contaminated sharps; and
- Non-infectious waste.

The definition and categories of *Regulated Waste* provided by OSHA include:

<u>Regulated Waste</u>: Liquid or semi-liquid blood or other potentially infectious material (OPIM); contained items that would release blood or OPIM in liquid or semi-liquid state if compressed; items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or OPIM.

This definition of *Regulated Waste* can produce three general categories of waste generated by dental facilities, including:

- Regulated waste consisting of *contaminated sharps*;
- Regulated waste other than contaminated sharps; and
- Non-regulated waste.

Comments

- 410 IAC 1-3-4, as well as OSHA, provides a definition of contaminated sharps.
- The CDC recognizes that any surface, instrument, supply, equipment, etc. that has been contaminated with any blood or OPIM is potentially infectious, but the risk of transmitting an infection from a particular contaminated item varies according to various factors. OSHA's definition of regulated waste acknowledges this fact.
- The CDC has established a special circumstance that applies to extracted teeth, which are clearly a body part and infectious waste. The CDC states that, "extracted teeth can be returned to patients on request, at which time provisions of the standard (OSHA blood borne pathogens standard) no longer apply."

OPINIONS

In the opinion of the OHP, the OSHA definition of regulated waste needs to be considered when considering infectious waste, as defined by 410 IAC 1-3-10, and what constitutes infectious waste and non-infectious waste in dental facilities in Indiana.

In the opinion of the OHP, before returning an extracted tooth to a patient upon his/her request, the tooth should be treated to the OSHA standard for sending a tooth to a laboratory. That is, before an extracted tooth is returned to a patient it should be cleaned and surface disinfected with an EPA-registered hospital disinfectant, and rinsed and placed in an impervious container, such as a sealed plastic bag or other similar container. Once an extracted tooth is returned to a patient upon his/her request, it becomes the responsibility of that patient.

CONTAINMENT

According to 410 IAC 1-3-24, all persons and facilities subject to this rule (Infectious Waste, Rule 3) shall ensure that *Infectious Waste* is at all times *contained* in a manner that will reasonably protect waste handlers and the public.

- Infectious waste consisting of *contaminated sharps or contaminated objects that could potentially become contaminated sharps*, and more (see 410 IAC 1-3-24(b), shall be placed in containers that are:
 - leak proof, rigid and puncture-resistant;
 - tightly sealed to prevent expulsion;
 - o labeled with the biohazard symbol; and
 - o effectively treated (with heat treatment) prior to being stored in an *unsecured* area (or if untreated stored in a *secured* area).

- Infectious waste other than contaminated sharps (see 410 IAC 1-3-24(c)) shall be placed in containers that are:
 - o impervious to moisture;
 - sufficient strength and thickness to prevent expulsion;
 - o secured to prevent leakage or expulsion;
 - o labeled with biohazard symbol; and
 - o effectively treated (with heat treatment) prior to being stored in an *unsecured* area (or if untreated stored in a *secured* area).
- Non-infectious waste (or OSHA's non-regulated waste) may be placed in the regular trash.

STORAGE

Infectious waste that is treated prior to transport and disposal may be stored in an unsecured area.

Infectious waste that is not treated prior to transport, required treatment and disposal must be:

- stored in a secured area that,
 - o is locked or otherwise secured;
 - o affords protection from adverse environmental conditions,
 - has a prominently displayed biohazard label (on the entrance to the secured area);
- stored in a manner that preserves the integrity of the container;
- stored in a manner that is not conducive to rapid microbial growth and putrefaction; and
- any reusable containers for infectious waste are disinfected each time they are emptied, unless protected by disposable liners, etc., that are removed with the infectious waste.

TREATMENT

Facilities subject to this rule shall either:

- Effectively treat Infectious Waste on-site, or
- Transport Infectious Waste off-site for effective treatment

See 410 IAC 1-3-26 for definition of effective treatment.

<u>Infectious Waste</u> that has been <u>effectively treated on-site</u> may be stored, transported, and disposed in the usual manner for waste that is non-infectious.

Opinion

The OHP considers <u>heat treatment</u> with an autoclave or dry heat oven, according to the manufacturer's instructions, an effective treatment for Infectious Waste in a dental facility.

TRANSPORT

Label

Prior to transporting off-site, whether infectious waste is <u>treated on-site</u> or <u>treated off-site</u>, a dental facility must <u>label</u> <u>all infectious waste containers</u> with the following information:

- o name, address and phone number of generating facility (dental facility); and
- o name, address and phone number of treatment facility (dental facility or commercial vendor).

Log (or forms from a waste management company)

Prior to transporting off-site, whether infectious waste is <u>treated on-site</u> or <u>treated off-site</u>, a dental facility must keep a <u>log</u> (and/or retain <u>forms</u> from a commercial vendor) for <u>all infectious waste containers</u> with the following information:

- o name, address and phone number of generating facility (dental facility);
- o name, address and phone number of treatment facility (dental facility or commercial vendor);
- o brief description of the waste and the method of treatment; and
- the signature(s) of a responsible person (preferably signatures from both the responsible member of the dental facility staff and the responsible person transporting, providing any required treatment, and disposing of the waste).

Note: Once infectious waste containers have been removed from a dental facility for transport, any required treatment, and disposal, then these containers with treated or untreated infectious waste fall outside the realm of responsibility of the OHP.

COMPLIANCE

IC 16-41-16-9 gives the ISDH the right to inspect facilities for possible violations pertaining to infectious waste.

As part of investigations into alleged violations of universal precautions in dental facilities, the OHP reviews the <u>written policies and procedures</u> for containing, labeling, logging, treating, and disposing of infectious waste, and reviews the necessary <u>documentation</u> associated with the handling of infectious waste (410 IAC 1-3).

IC 16-41-16-10 provides for the issuance of civil penalties for violations.

The OHP will attempt to resolve any documented violations, but may refer documented and unresolved violations to the **Office of the Indiana Attorney General** for further action, which generally involves review by the **Indiana State Board of Dentistry** and any further actions it deems necessary.